



The City of Raleigh

## Stormwater Management Advisory Commission

May 4, 2017  
3:00 p.m.

Conference Room 305  
Raleigh Municipal Building

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**Commission Members Present:** Matthew Starr (chair), Vanessa Fleischmann (vice chair), Marion Deerhake, Mark Senior, Evan Kane, Francine Durso, David Webb, and Kevin Yates.

**Commission Members Absent:** Chris Bostic and Ken Carper

**Staff Members Present:** Blair Hinkle, Suzette Mitchell, Kelly Daniel, Lory Willard, Michael Atkinson, Kristin Freeman, Carmela Teichman, Amy Farinelli, Scott Smith, Wenju Zhang, Scott Bryant, Chet Lepley, Carrie Mitchell, Dominick Smalls, Dale Hyatt, Kevin Boyer, Justin Harcum, Lauren Witherspoon, Sonya Debnam, Veronica Barrett, Veronica High, Ashley Rodgers, and Ben Brown.

**Guests:** Patrick Smith, Craig Newton, Beth Gphart Wyant, and Natalie Carmen.

**Meeting called to order:** 3:12 p.m. by Matthew Starr (chair)

1. **Welcome, Introductions, Excused Absences**

- Appointments - A welcome was extended to Mark Senior, the newest Commission member, who was appointed by Raleigh City Council on May 5, 2017.

**Excused Absences:**

- Mr. Senior made a motion to excuse Ken Carper and Chris Bostic from today's meeting, and Mr. Webb seconded. The motion was passed unanimously.

2. **Approval of the Minutes - April 6, 2017 Meeting**

- Mr. Webb made a motion to approve the meeting minutes and Mr. Senior and Ms. Fleischmann seconded. The motion was approved unanimously.

3. **Stormwater Staff Report - Introduction of New Employees**

- Stormwater Quality Technician - Amy Farinelli (*from Dan River Basin Association*)
- Senior Engineering Inspector - Chet Lepley (*from the City of Raleigh's Development Services and Transportation Field Services*)

\* *SMAC Member Photo Update: Photographs taken of the Commission today will be used in introductory SMAC materials, newsletters, and announcements. Staff will attempt to pull together another photo session when all members are in attendance.*

4. **Stormwater Quality Cost Share Projects - 316 Seawell Avenue**

Lory Willard informed the Commission of the two projects that will be presented. The first project is for a 1,700-gallon underground cistern to collect runoff from 2,000 square feet of rooftop

at the location, which is located in the Pigeon House Branch Watershed. The petitioner has agreed to annual reporting and a 10-year maintenance term.

316 Seawell Avenue	
<b>Total Project Cost</b>	<b>\$7,200</b>
Stormwater/City Contribution (90%)	\$6,480
Petitioner Contribution (10%)	\$720

**Ms. Durso** asked if the project is for a private home and what will happens if the owner sells the property. **Lory Willard** said she only knows the petitioner is the property owner. If the property owner decides to sell, there is a stipulation that the owner will have to pay off the remaining percentage. For instance, if the owner owns the property for five years, 50% on what was reimbursed through the program will have to be paid back, or the owner can have the next property owner take over the maintenance agreement.

**Motion:**

Mr. Senior made a motion to approve the project and Mr. Yates seconded. The motion was approved unanimously.

5. **Stormwater Quality Cost Share Project – 7506 Falls of Neuse Road**

\*Note: David Webb informed the chair that he is a member of this church and will have to be recused.

**Motion:**

Mr. Kane made a motion to allow Mr. Webb's recusal and Mr. Senior seconded. The motion was approved unanimously.

**Lory Willard** said the second project is for two treatment swales and a bioretention area in the parking lot, which is located in the Perry Creek Watershed. The petitioner agreed to annual reporting and a 10-year maintenance term.

7506 Falls of Neuse Rd	
<b>Total Project Cost</b>	<b>\$250,000</b>
Stormwater/City Contribution (90%)	\$225,000
Petitioner Contribution (10%)	\$25,000

**Ms. Deerhake** asked whether any of the remaining balance (\$600,000) for the Stormwater Quality Cost Share Program will be rolled over for next year, or will the division apply for funds each year. **Blair Hinkle** replied that this funding is Capital funds and the account accrues, so any remaining funds will rollover.

**Mr. Senior** asked if the church would have a problem if the public looked at the project once it has been installed. **Craig Newton (Church Representative)** answered that the church would not have concerns with publicizing the project upon completion, and that the church will have some form of an educational display or signage to inform the public about the project.

**Motion:**

Mr. Senior made a motion to approve the project, and Ms. Fleischmann seconded. The motion was passed unanimously with a vote of 7-0 (*Mr. Webb abstaining*).

6. **Drainage Assistance Project – 7104 & 7108 Hickory Nut Drive**

Summary: The project will replace a failing corrugated metal pipe with a new 36-inch reinforced concrete pipe (RCP) to alleviate sink holes occurring near an occupied dwelling. The project will also provide a concrete headwall and riprap energy dissipater at the outlet of the system.

Before presenting the project, **Dale Hyatt** (*Project Engineer II*) thanked the Drainage Assistance Program staff on their efforts to address over 80 calls and emails during the recent rain events. **Blair Hinkle** additionally thanked the Drainage Assistance Program staff and Dale Hyatt for overseeing this section in the absence of a senior project manager.

Dale Hyatt provided the Commission with an overview of the project that is under review; projects already approved this fiscal year; current pending projects; and available funding.

Estimated Project Costs	
Hickory Nut Drainage Improvements	\$100,000
FY17 Project Funds Approved to Date	\$1,125,000
Total Estimated Project Costs This Period	\$100,000
FY17 Budget	\$1,250,000
FY17 Remaining DA Funds	\$25,000

**Mr. Webb** asked if there would be any conflict with sewer crossing. **Dale Hyatt** said staff would know more once the surveyor details the elevation information regarding the sewer line. Staff does not believe sewer crossing will be a conflict, but it will be something to consider in the drainage solution.

**Mr. Senior** asked whether the option of “daylighting” was considered. **Dale Hyatt** indicated there is not a lot of room for daylighting. Daylighting the section along the existing alignment would bring in some potential issues with the sewer line and vegetative buffer that is already along that route.

**Ms. Fleischmann** questioned if there will be a contingency built into the cost because of the uncertainty of the construction fix of the sewer line. **Dale Hyatt** answered that a contingency would not be included. He stated in the past when working with sewer lines there is usually ways where staff can design a solution that does not present major cost concerns. Initial designs include looking at constraints, limitations, and how it impacts total project cost. **Veronica Barrett** commented that this is a fairly conservative estimate. **Blair Hinkle** added that we have struggled with that topic on Drainage Assistance projects. He indicated that staff does their best to conservatively estimate the cost in order to use the allocated funding. The division’s approach is to do the best we can with the cost estimates. We recognize some projects cost will exceed that estimate while others will be less than the estimate, but at the end of the year it will ultimately all come out in a wash.

**Motion:**

Mr. Senior made a motion to approve the project and Mr. Yates seconded. The motion was approved unanimously.

**Marion Deerhake** asked if the City of Raleigh evaluates for areas vulnerable to sinkholes. **Blair Hinkle** responded that the City does not. We currently do not have a Comprehensive Asset Management program, but when it is established part of the program will encompass evaluating old and failing pipes to determine repair needs, and to find high priority areas for repairs to prevent sinkholes. In the FY18 budget, the division anticipates adding an Asset Manager to establish a Stormwater Asset Management program.

7. **Mosquitos and Stormwater Control Measures (SCMs)**

**Blair Hinkle** remarked that today’s presentation is in response to the Commission’s request to have staff provide a presentation on vector control related to stormwater management. In preparation, staff contacted individuals in the SCM management and lake management industries and **Michael Atkinson** (*Stormwater Engineering Technician*) provided a brief presentation based on research of relevant, technical literature. There was a discussion on the

connection of those concepts to the way in which the City manages SCMs and what is being done regarding mosquito management.

**Francine Durso** inquired how covers could be designed for open wet systems. **Michael Atkinson** responded that covers are more for vaults, sumps, and underground basins. He stated that ponds with standing water for seven days might attract mosquitos. However, agitating the surface of the water will eliminate mosquitos. There are some vegetative plants and approved pesticides that will do that.

**Ms. Deerhake** asked if the City has vector control staff. **Blair Hinkle** replied no, but it is a function we rely on Wake County for and we do not know the extent they engage in mosquito control. **Evan Kane** said he does not believe Wake County has any recent active fogging, but it is a topic actively discussed between the Departments of Human Services and Environmental Services. **Lauren Witherspoon** added that the city has a public nuisance code, and some of it covers mosquitos, which is implemented by Housing and Neighborhoods.

**Blair Hinkle** noted that we are trying to convey that engineered stormwater devices are all about the design and maintenance. We feel this is a strong program to ensure continued, successful maintenance of SCM devices. We get complaints about new development going in and stormwater ponds in the backyard meaning a lot more mosquitos, but in reality it does not lead to an increase in mosquitos because we require those devices be maintained appropriately and properly. **Mr. Starr** said this information should be shared with the public as well as the 95% SCM device compliance rate. By doing so, it will go a long way in curbing the fear of the public believing these devices will be harmful. **Blair Hinkle** added that staff recognizes other potential challenges that may occur regarding old stormwater infrastructure.

**Ms. Durso** asked how you address devices that are not in compliance. **Justin Harcum** (*Stormwater Inspections Coordinator*) replied that property owners responsible for an SCM device would be notified if staff notices or discovers a maintenance item. Also, if an annual inspection is not provided for an SCM device, staff will send a notice through certified mail to have maintenance completed or an annual report submitted.

**Mr. Starr** asked if the division has done outreach of rain barrels and how homeowners can cut down on mosquito populations with proper maintenance of the rain barrels. **Lory Willard** replied that the division held its first rain garden/rain barrel workshop and provided instruction on what needs to be in place to avoid mosquitos.

8. **Other Business**

**Blair Hinkle** wanted to know if the Commission plans to take July off as they have done so in the past. If deciding to go that route, the policy of reviewing Drainage Assistance Program projects on odd months will need to change to August.

**Ms. Durso** voiced to the chair that she supports the idea of not convening in July and both **Mr. Kane** and **Ms. Fleischmann** supported that idea. The Commission agreed to cancel the July meeting.

**Ms. Deerhake** complimented Carmela Teichman and Kirstin Freeman on their involvement in the Environmental Awards.

**Adjournment:** Mr. Yates made a motion to adjourn and Mr. Senior seconded. The motion was passed and the meeting adjourned at 4:11 p.m.

Suzette Mitchell